

STATE OF ALABAMA
DEPARTMENT OF EDUCATION
MONTGOMERY

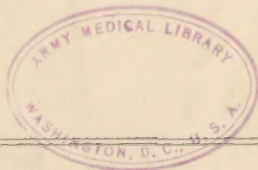
PLANS AND SPECIFICATIONS
FOR
APPROVED EARTH PIT TOILETS FOR ALABAMA
RURAL PUBLIC SCHOOL BUILDINGS



PREPARED BY
STATE DEPARTMENT OF PUBLIC HEALTH
IN COOPERATION WITH
STATE DEPARTMENT OF EDUCATION
MONTGOMERY, ALABAMA

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FOREWORD

The proper construction and operation of an approved type of toilet is essential to the school system of Alabama. Pupils who are ill, and those suffering from hookworm disease can not effectively participate in the activities of the public schools.

This bulletin has been assembled and prepared by the Bureau of Sanitation, State Department of Public Health, in cooperation with the State Department of Education, as a guide in the construction and operation of toilets designed to fulfill these requirements. It represents a sound application of the scientific principles of sanitation to the problem of erection and operation of toilets. This bulletin of instructions is the official guide to all school and health officials charged with the responsibility of administering the laws relating to sanitary conveniences of the public schools, and supersedes all previous bulletins covering this subject.

STATE DEPARTMENT OF EDUCATION,

A. H. COLLINS,
State Superintendent of Education,

STATE DEPARTMENT OF PUBLIC HEALTH,

J. N. BAKER,
State Health Officer.

ACKNOWLEDGED

LAWS RELATING TO SCHOOL SANITATION

The laws specifying the installation of sanitary toilets are found in Section 36, Article IV, School Code of Alabama—1927 and in Section 73, Article V, School Code of Alabama—1927.

ARTICLE IV—Section 36.

RULES AND REGULATIONS, ADOPTION OF.—The State Board of Education shall adopt rules and regulations for the proper construction of school buildings, for the sanitation of schools, for the physical examination of school children, and, in conjunction with other State authorities, shall see to it that the rules relating to school health, compulsory education, and child conservation are enforced.

ARTICLE V—Section 73.

RULES, BY WHOM PREPARED.—The State Superintendent of Education shall prepare, or cause to be prepared, and submit for approval to the State Board of Education, rules and regulations for the hygienic, sanitary and protective construction of school buildings. He is empowered and directed to recommend for condemnation for school use by the State Board of Education all buildings used for school purposes that violate these rules and regulations.

Also:

In Accordance with Chapter 31, Section 1134, Political Code 1923, as Amended and Approved Sept. 9, 1927.

SECTION 1134. SANITARY PRIVIES: HOW REQUIRED: It shall be unlawful to build, maintain or use an insanitary privy, or one that is or is likely to become a menace to the public health, anywhere within any incorporated town or village or hamlet or at or within three hundred yards of any school, church, dairy, or other food handling establishments, or at any residence which is less than three hundred yards distant from any other residence. The State Board of Health, or the committee of public health, acting through its duly authorized agents or employees, shall require, by notice, every person, firm, or corporation, or agent thereof, owning or occupying property in such districts as described above to install the required number of sanitary privies conforming to specifications of the State Board of Health, or to connect with sewer lines, or to dispose of sewage in such sanitary manner as shall be approved by the State Board of Health. All privies built following the serving of a notice shall conform in every respect with the specifications, rules and regulations applying to sanitary privies made and promulgated by the State Board of Health, and shall be maintained as prescribed by the said rules and regulations.

WHY THE STATE DEPARTMENT OF EDUCATION AND THE STATE DEPARTMENT OF PUBLIC HEALTH PRESCRIBE SANITARY TOILETS

Sanitary school toilets are necessary to protect the children from typhoid fever, dysentery and hookworm. Typhoid and dysentery are transmitted by the conveyance of infected body discharges from the place of deposition to the mouth mainly by flies, water, or unclean hands. Hookworm disease results from the infection of the soil by bodily discharges containing hookworm eggs. The eggs hatch in warm soil and the small worms enter the skin of the feet or hands, travel through the circulatory system to the lungs, are coughed up and reach the intestinal tract.

The school toilet is the most important toilet in the community as its influence for health or disease is greatest. If any of the above diseases are present in the community, they will surely be brought to this point through the concentration of pupils.

Pupils who attend schools that are provided with sanitary toilets acquire an excellent idea of sanitation, which is of value to them throughout life. It is in this formative period of the child's life that the foundation for future health is laid by the formation of regular habits. These result through the use of properly constructed and maintained toilets that can be used without discomfort. Many of the ailments that occur later in life are due directly to either the unfavorable or distant location or the failure to maintain the school toilets in a clean and sanitary condition. It is a dangerous error to suppose that the function of elimination can be postponed or neglected with impunity.

Regular inspections by the teacher are necessary if the full educational and health value of such structures are to be realized. A filthy outbuilding does not enhance the reputation of an otherwise clean and wholesome environment.

DUTIES OF SCHOOL BOARDS: Before erecting a new privy or remodeling an old one the authorities should become thoroughly acquainted with the provisions of this bulletin and all contracts or agreements for construction work shall contain a clause requiring that such work shall conform with all the requirements herein set forth.

It is the duty of all school boards and authorities to see that privies once installed are properly maintained. No automatic toilet is known.

SPECIFICATIONS

Location: (a) The privy shall be located at least fifty feet from any well, spring, or source of domestic water supply, and should be located below the supply, considering the natural grade of the ground surface.

(b) The privy shall not be located upon swampy ground or where formations of solid or fissured rock lie closer than ten feet below the surface. Exception to these rules may be permitted at the discretion of the State Department of Public Health.

(c) The privy shall be located not more than 150 feet from the main building.

(d) The privy building should face south in order to prevent northern and northwestern winter winds and rains from blowing into the building.

Requirements: Every school shall be equipped with:

(a) At least two properly separated (with respect to privacy), suitable, and convenient privies or water-closets, one for each sex, and so designated by a neat sign.

(b) One privy seat for every twenty females, or fraction, for high school grades and one privy seat for every fifteen females, or fraction, for elementary grades.

(c) One privy seat for every twenty-five males, or fraction, and one urinal space for every twenty-five males, or fraction, for both high school and elementary grades. Eighteen inches shall be considered one urinal space.

(d) Good dry walks should lead to all privies. The space around these structures shall be well drained so that rain water does not accumulate.

Excavation and Ditches: The pit shall be dug the exact size as indicated in Table 1.

Table 1

Number of Seats	Pit Dimensions	Length of Pit	Width of Pit
1	_____	3'-2"	4'-4"
2	_____	6'-4"	4'-4"
3	_____	9'-6"	4'-4"
4	_____	12'-8"	4'-4"
5	_____	15'-10"	4'-4"
6	_____	19'-0"	4'-4"
7	_____	22'-2"	4'-4"
8	_____	25'-4"	4'-4"

All earth except that needed for mounding, as indicated on the drawings, shall be removed. Where the privy is built on sloping ground, it shall be protected with drainage ditches located not less than six feet up the slope from the pit. The ditches shall have not less than a one-foot bottom and be not less than one foot in depth, with sides sloping not less than one to one.

Design: The design and the dimensions shall conform to the drawings with the following exceptions:

1. The entrance of the screen shall be at the end of the structure most convenient to the pupils. (Note: The urinal for the boys' privy shall be on the end nearest the entrance.)
2. The height of the screen shall be increased, where needed, to secure privacy. (The relative elevation of school building and privy will determine.)

Lumber: The lumber shall be sound, thoroughly seasoned, and dry.

Riser: The riser shall be of cast iron and conform to the minimum specifications of the State Board of Health governing the manufacture of same.

Concrete: All concrete shall be mixed in proportion by volume—one part cement, two parts sand, or shall be mixed in proportion by volume—one part cement, two parts sand, and four parts clean gravel, slag or hard crushed stone. The sand should be of coarse grain, for a fine sand requires more cement than coarse sand for equal strength. The coarse aggregate, gravel, etc., shall be uniformly graded from fine to coarse, not exceeding one inch in size. Both fine and coarse aggregates shall be clean and free from clay, loam, mica, or organic matter. The minimum amount of water shall be used that would give a workable concrete. The water shall be added in small quantities and thoroughly mixed so as to produce a plastic mass concrete. The slab should be thoroughly cured by covering and periodic wetting. Cracked slabs shall be rejected. Only Portland cement shall be used and shall conform to the "Standard Specifications for Portland Cement", of the American Society of Testing Materials. The construction joint shall be of tar paper.

Reinforcement:

1. (Slab) The reinforcing shall be $\frac{3}{4}$ pound of steel per square foot of slab surface. One-quarter inch to $\frac{3}{8}$ inch round steel reinforcing bars, uniformly spaced, shall be placed in the slab one inch from the bottom surface.
2. (Concrete Curbing) Heavy barbed wire or one-quarter inch round steel reinforcing bars shall be placed as indicated in the drawings.

Roof Deck: Where roll roofing or shingles are used, the roof shall be decked solid. Where V-crimped or corrugated metal is used, the decking shall consist of five or more 1" x 6" strips, equally spaced.

Urinal Wall: The 20-gauge sheet metal urinal wall shall be thoroughly dried and treated with two coats of hot petroleum asphalt on both sides before installing.

Roofing: The roofing shall be shingles conforming to the main building, roll roofing weighing at least 75 lbs. per square, or V-crimped or corrugated galvanized sheet metal not lighter than twenty-eight gauge.

Siding: The siding shall be vertical or horizontal, conforming to the main building, or V-crimped or corrugated galvanized sheet metal, not lighter than twenty-eight gauge.

The drain board shall be of 1" x 6" boards lapped or V-crimped or corrugated galvanized sheet metal of not less than twenty-eight gauge with two pieces 1" x 6" decking.

INSTRUCTIONS FOR ERECTING

Pit: The size of the pit is very important. It should be dug so that the wood curbing will fit snugly to prevent caving and the concrete footing will rest on the original or solid ground. A template should be built with the outside dimensions the exact size of the pit, and should be well braced to prevent distortion. The pit should be dug accurately by the template from top to bottom.

Wood Curbing: The boards for the front and the back are cut the length of the pit minus twice the thickness of the boards, which is approximately four inches less than the length of the pit. The end boards are cut 4'-4", the width of the pit. The front and back are built on the ground by first nailing the top and bottom boards to the corner posts, intermediate posts and bottom sill. Care is taken that they are square and the intermediate posts are properly spaced. The other boards are then placed solid at the top and spaced up to two inches at the bottom. If sufficient labor is available to lower the curbing intact, the end boards are placed with the same spacing as for the front and back. If sufficient labor is not available, the front and back are lowered into pit separately. The ends are made by nailing the end boards to four additional two by four studs (two for each end). Care should be taken to place the studs so that they will match with the corner posts. The ends are then placed and the studs spiked to the corner posts. The bracing for the curb and the supports for the decking are cut to fit and nailed in as indicated on the drawings. One-inch decking for the pit curb is placed over the top. The two boards which come under the riser are sawed in perpendicular cuts, spaced the length of the riser apart and extent the width of the riser. These are cleated underneath to provide support for riser and slab until the concrete has set. The sawed portions inside the riser are then knocked out and removed.

Mixing of Concrete: When it is necessary to mix the concrete by hand, it should be done on a water-tight platform of sufficient size to accomodate men and materials for rapid mixing. The batches should not exceed one-half cubic yard. The fine aggregate, sand, should be spread evenly upon the platform, then the cement placed upon the fine aggregate, and these mixed thoroughly until of an even color. The coarse aggregate is then added and thoroughly mixed with the cement and sand. The water is added as needed to give a workable plastic mass concrete which is not too wet. As the water is added, the mass should be turned with shovels or hoes until thoroughly mixed and all the aggregates are covered with mortar. The tools should be cleaned after being used.

Concrete Curbing: The earth is removed with a square pointed shovel, the size and depth of the curbing being as shown on the drawings, the depth being 20" below the original ground surface. The form is built the exact size of the slab and constructed so as to provide a water table as indicated. It is leveled and staked in place. Care should be taken to see that the top of the form is four inches above the top of the wooden curb decking. The inside of the form is well oiled to facilitate removing. In building the boys' privy, the iron pipe for the urinal is fastened in place. The concrete is then mixed, as given in the specifications, and the reinforcing placed as shown on the drawings. When the concrete curbing is poured even with the top of the decking, the tar paper structural joint is placed as shown in the drawings. As the concrete is poured, it should be well-tamped so as to eliminate air bubbles and voids, thereby securing a dense concrete.

Concrete Wall under the Front End of the Slab: The concrete wall or footing under the front end of the slab shall be provided as shown on the plans. A form, 10" wide by the length of the pit plus 2" outside measurements (see bill of materials) provides the inner form for this footing, and for the extensions of the sides of the concrete curb, and the outer form for the front part of the concrete curb for the pit. After excavation is made for the footing and the form is placed and securely staked, concrete is poured to its top elevation and leveled off ready for the tar paper construction joint. This form may be left in place by filling the space inside it with firmly-tamped earth and placing concrete for the slab directly over the earth and form.

Concrete Slab: Before pouring the slab, the cast iron riser is placed on the pit decking and the $\frac{1}{2}$ " x 3" expansion or slab division joints between the units are put in as indicated. The reinforcing rods are cut the proper length, placed one inch above the pit decking, and fastened so that when the concrete is poured it will not be forced out of position. Concrete is then placed, being tamped, to the top elevation of the form. A straight edge is worked across the top by a saw-like and forward motion to thoroughly compact the concrete and provide a smooth even surface. After the concrete begins to set, the slab surface is trowelled smooth and glazed through the use of proper concrete working tools. The bolts are then imbedded in the concrete as shown on the drawings. The slab should be protected from premature drying by covering with burlap and sprinkling periodically with water for several days.

House Framing: The sills are placed on the floor beside the bolts and marked for boring so as to secure a perfect fit. They are then bolted to the slab. The corner and center studs with the top ends cut on a slope of one inch vertical to four inches horizontal are nailed in place and braced. Care is taken to see

that they are square with the slab and plumb while being braced. The house plates, house belting and partition sills are nailed in place as shown on the drawings. The framing for the side vent spaces, the additional studs and the cross members over the front are cut to fit and inserted.

Roof: The rafters are cut on a slope of one inch to four inches so that the ends, when placed, will be vertical. Care is taken in properly spacing the rafters. If roll roofing or shingles are used, the roof is decked solid. When sheet metal roofing is used, the decking is to consist of five or more 1" x 6" strips, equally spaced. The front and back fascia boards are then nailed on the end of the rafters and the end fascia boards cut to fit and placed. In laying the roofing, lap each joint not less than two inches.

Siding: The method of placing the siding depends upon the material selected. The material should be securely fastened to the framing. Where sheet metal is used, all edges should be protected to prevent injury to the pupils.

Urinal: The foundation wall for the urinal shed should be of concrete and the same height as the slab. Structural joints are made between the foundation wall and the slab and concrete curbing to facilitate moving. The form for the outside of the concrete urinal is staked in place. The concrete is mixed according to the specifications. Special care in adding the water should be given; the concrete should not become too "soupy" or too soft. No inside forms are used for shaping the urinal trough; therefore, care should be given to retaining the proper slopes and to drain into the low point. After the forms are removed the space in the shed not occupied by the urinal is filled with well-tamped gravel to within three inches of the top of the urinal. The top three inches may be concrete or fine gravel with dry cement tamped in place. The top surface should have a slight slope toward the urinal.

Screen: The screen foundation piers are located as shown on the drawings. The forms for the piers above the ground are built and fastened in place. Care should be taken to see that all piers are of proper elevation before the concrete is placed. Bolts with five inches extending above the top of the concrete are imbedded in the piers. After the concrete has thoroughly dried, the bottom runner is bolted to the piers. The posts are spiked to the runner and braced. Care should be taken to see that the posts are plumb and square with the building. The belting and top runners are then placed. The bracing for the screen is fastened to the house posts, and the siding is placed as shown on the drawings.

SPECIAL ITEMS OF MAINTENANCE

Lye should be added as needed to help in the suppression of odors. No other chemical should be used for this purpose. One can of lye per seat every two or three months should probably prove effective. When the pit fills to within 18 inches of the top, it is necessary to move the house to another location. The life expectancy of a pit depends upon the soil conditions, the age of the users and the method of use and maintenance. As a rough guide, however, the pit should not fill faster than five-tenths of one cubic foot per student per year.

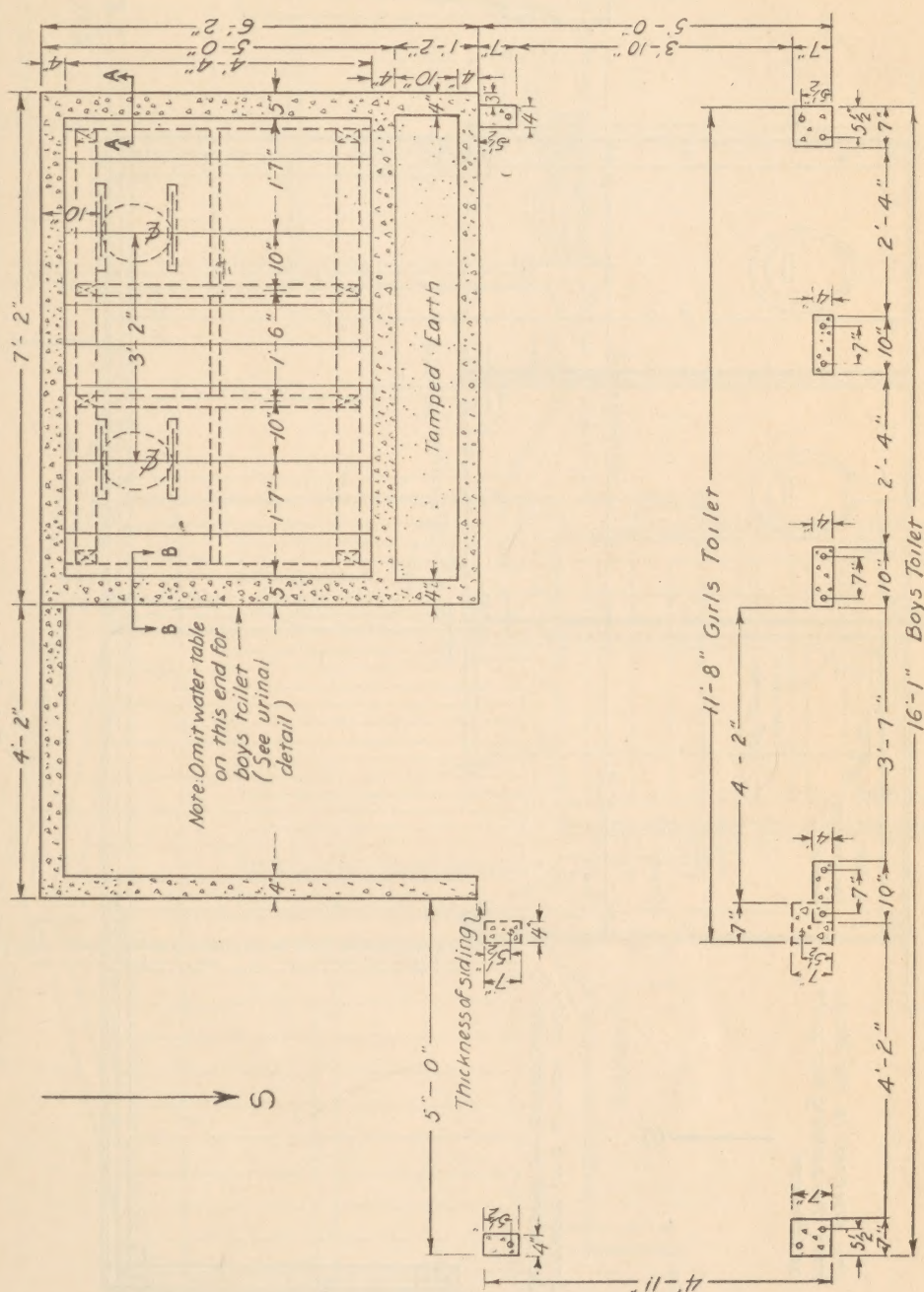
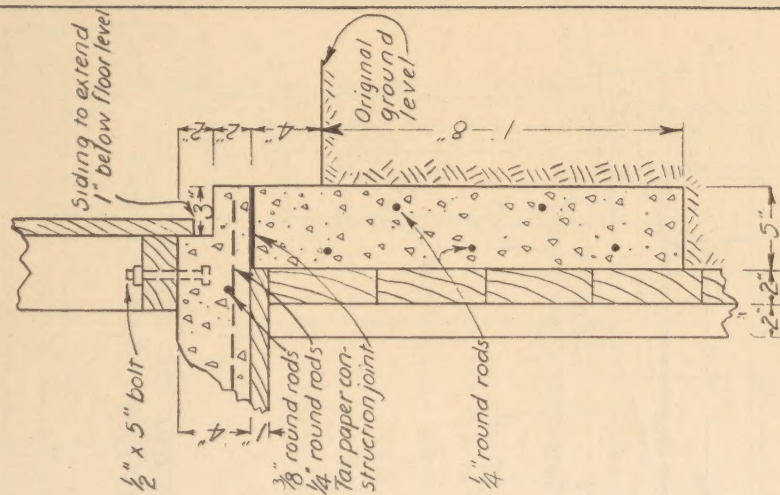
Only toilet paper should be permitted. Other heavier material will cause the pit to fill much more rapidly.

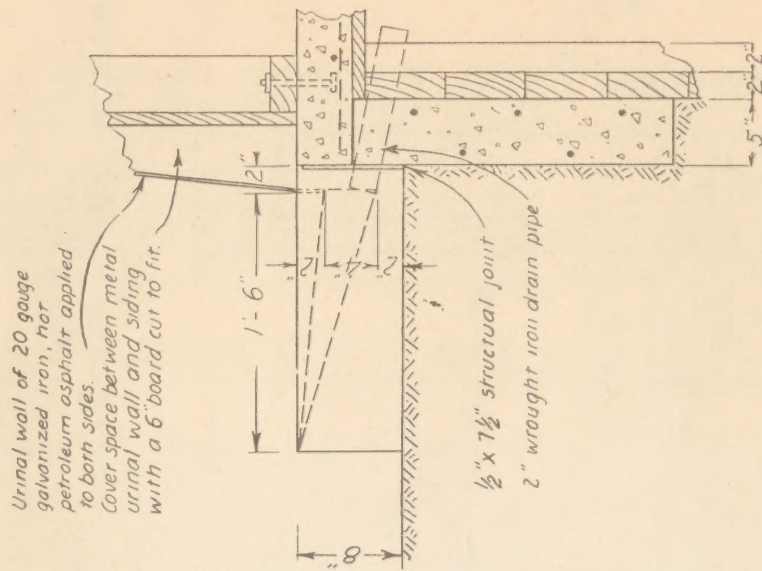
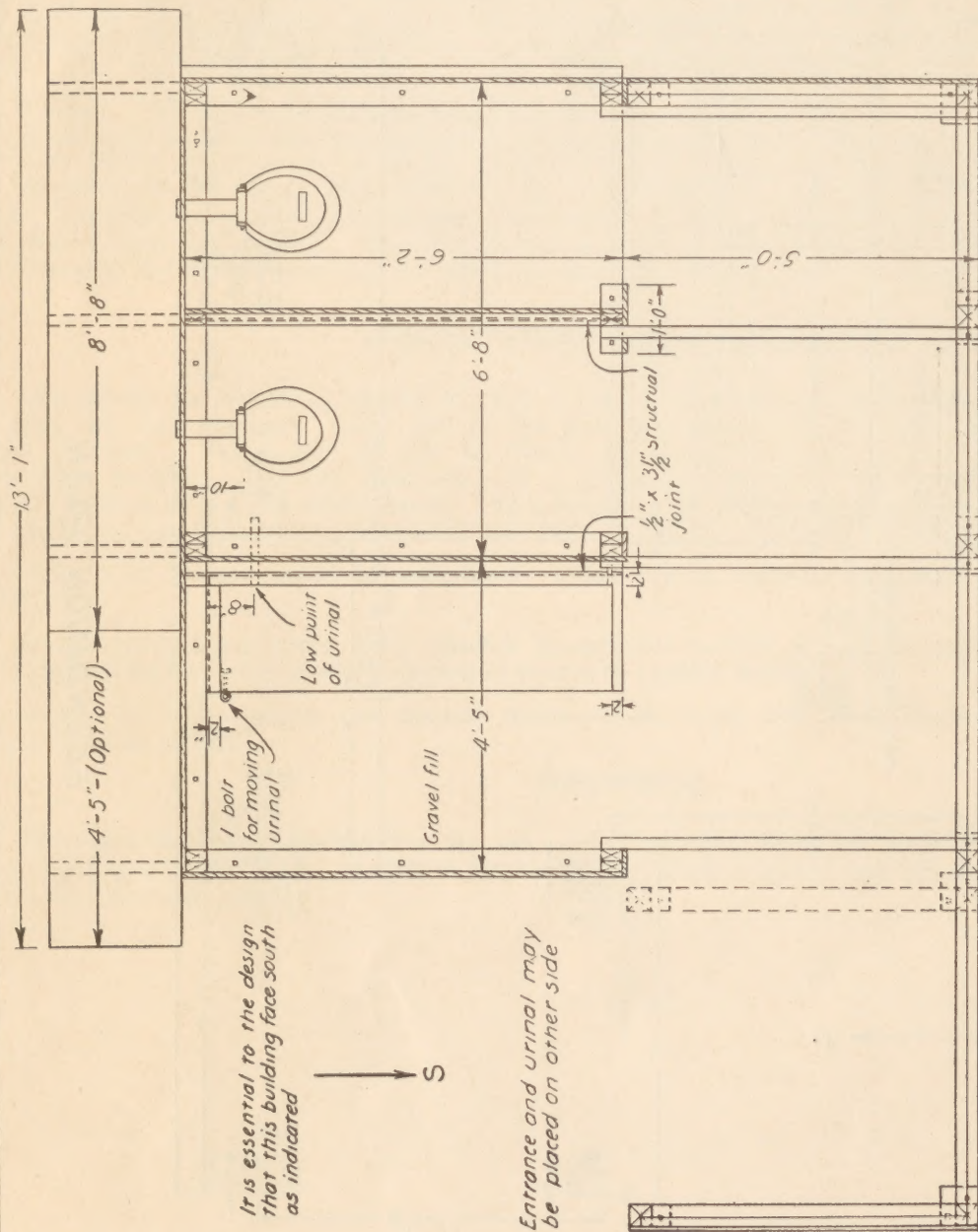
Should mosquitoes breed here (disease mosquitoes seldom, if ever, breed in pit toilets), they may be controlled by the use of a small amount of kerosene applied weekly.

Should fly larvae appear and become objectionable, write the State Department of Public Health for methods of control.

DRAWINGS

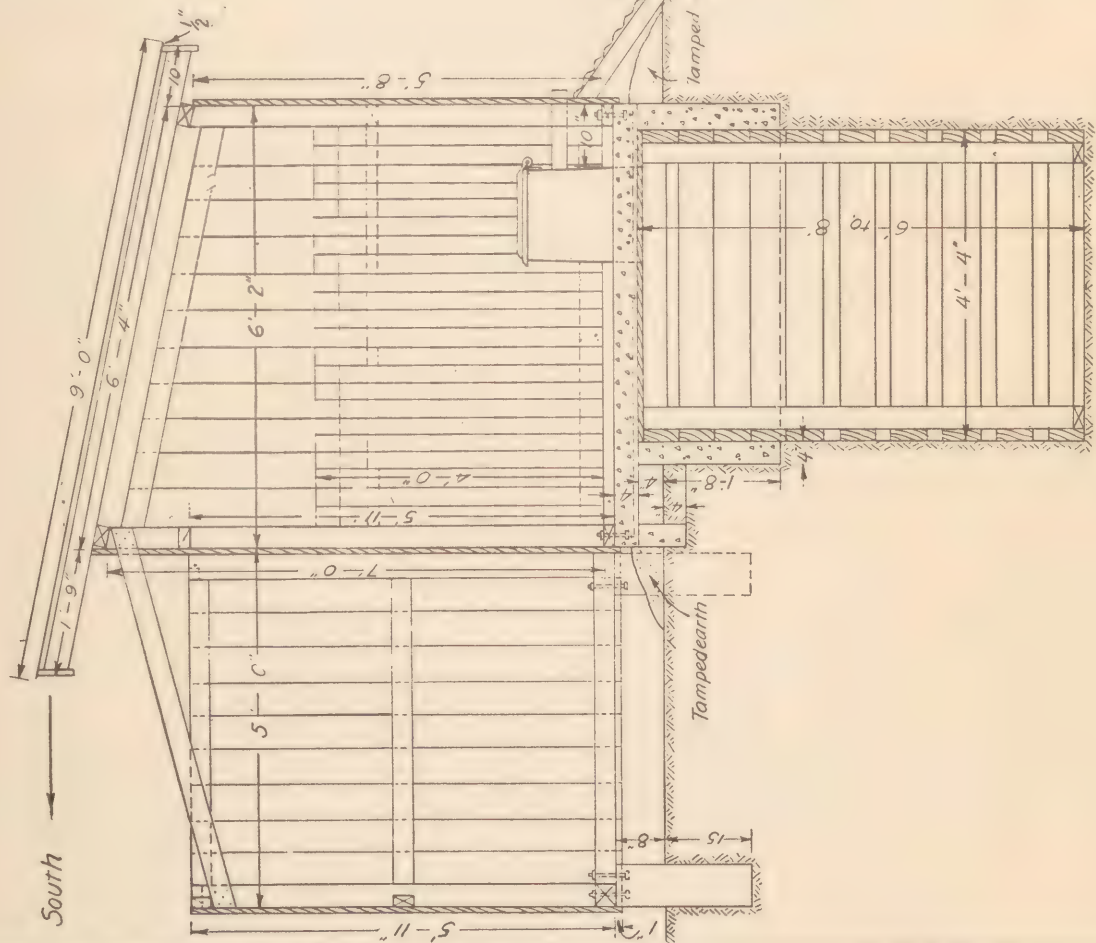
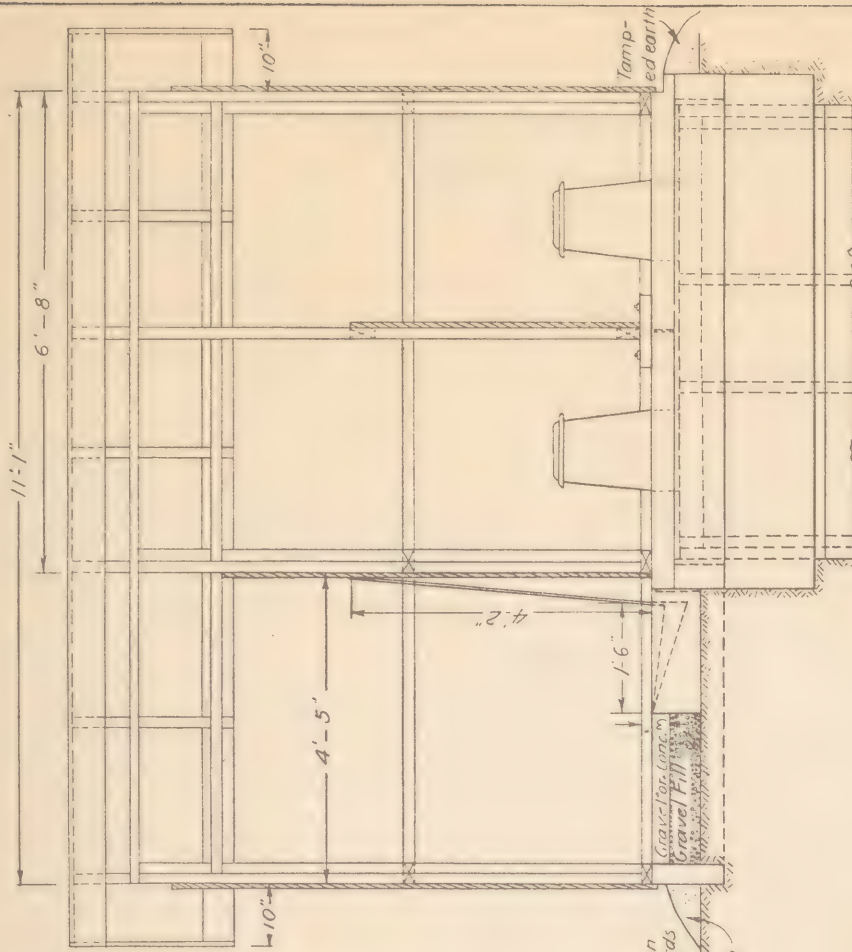
The three drawings which follow are for a boys two-seat earth pit toilet. Refer to Specifications, Page No. 5 and to Table No. 1, Page 6 for number of seats required and pit dimensions of various size toilets for boys and girls.





END VIEW OF URINAL
AND SECTION THROUGH PIT

PLAN



APPROXIMATE BILL OF MATERIAL

TWO SEATS FOR BOYS

(Note: No responsibility is assumed for any inaccuracy.)

Curbing for Pit 6 Feet Deep.

Pieces Cut to Fit	Description	Order
24 pcs. 2" x 6" x 4'-4"	Ends	8-2" x 6" x 14'
24 pcs. 2" x 6" x 6'	Front & back (cut to fit)	12-2" x 6" x 12'
4 pcs. 2" x 4" x 6'-1"	Corner posts	5-2" x 4" x 12'
4 pcs. 2" x 4" x 6'-1"	Intermediate posts	
2 pcs. 2" x 4" x 6'-0"	Foundation sills	2-2" x 4" x 10'
6 pcs. 2" x 4" x 3'-4"	Center ties (cut to fit)	
2 pcs. 2" x 4" x 2'-2"	Center floor supports	1-2" x 4" x 10'
1 pc. 2" x 4" x 1'-4"	Center floor supports	
4 pcs. 1" x 12" x 4'-4"	Decking	2-1" x 12' x 10'
4 pcs. 1" x 6" x 4'-4"	Decking	2-1" x 6" x 10'

Forming: (May be used on other privies of same size)

Pieces Cut to Fit	Description	Order
2 pcs. 2" x 8" x 7'-2"	Front and Back	1-2" x 8" x 16'
1 " 2" x 8" x 6'	Urinal end of slab	1-2" x 8" x 12'
1 " 2" x 6" x 6'-6"	Water table end	1-2" x 6" x 8'
1 " 2" x 4" x 6'-2"	Water table end	1-2" x 4" x 8'
1 " 1" x 8" x 4'-2"	Back of urinal shed	3-1" x 8" x 8'
1 " 1" x 8" x 3'-10"	Back of urinal shed	
1 " 1" x 8" x 6'-4"	Side of urinal shed	
1 " 1" x 8" x 6'-0"	Side of urinal shed	1-2" x 4" x 8'
1 " 2" x 4" x 6'-4"	Front curbing under slab	
1 " 1" x 4" x 6'-4"	Retaining wall under slab	1-1" x 4" x 8'
2 " 1" x 4" x 0'-10"	Retaining wall under slab	
1 " 2" x 8" x 6'-0"	Urinal side	Included above
1 " 2" x 8" x 1'-8"	Urinal end	Included above
12 " 2" x 4" x 2'-0"	Staking form in place	2-2" x 4" x 12'
1 " 1" x 3" x 6'-2"	Joint between slabs	1-1" x 3" x 8'

House Framing:

Pieces Cut to Fit	Description	Order
1 pcs. 2" x 4" x 11'-1"	Back sill	3-2" x 4" x 12'
3 " 2" x 4" x 5'-10"	End sills	
1 " 2" x 4" x 1'-0"	Front sill	Use extra cuts
7 " 2" x 4" x 5'-8" (+1")	Back studs (cut 1 to 4 slope—short corner)	3-2" x 4" x 12'-0"
4 " 2" x 4" x 7'-0"	Front studs (cut 1 to 4 slope—long corner)	2-2" x 4" x 14'-0"
3 " 2" x 4" x 5'-9"	Front studs (cut 1 to 4 slope—square ends)	3-2" x 4" x 12'
3 " 2" x 4" x 1'-1"	Front studs (long corner)	Use extra cuts
2 " 2" x 4" x 11'-1"	Plates (front and back)	2-2" x 4" x 12'
1 " 2" x 4" x 3'-1"	Front bracing	Given above
2 " 2" x 4" x 4'-3"	Front bracing	2-2" x 4" x 8'
4 " 2" x 4" x 2'-8"	Drain board	
7 " 2" x 4" x 8'-9" (+2")	Rafters (cut 1 to 4 slope—on both ends)	7-2" x 4" x 10'
3 " 2" x 4" x 6'-0"	Vent space (cut to fit)	2-2" x 4" x 12'
1 " 2" x 4" x 4'-1"	House belting back urinal	
2 " 2" x 4" x 2'-11"	House belting—back	3-2" x 4" x 12'
3 " 2" x 4" x 5'-6"	House belting—ends	
2 " 2" x 4" x 5'-6"	Partition	

Screen Framing:

Pieces Cut to Fit	Description	Order
2 pcs. 4" x 4" x 4'-7"	Sills end	1-4" x 4" x 10'
1 " 4" x 4" x 9'-7"	Sills front	1-4" x 4" x 10'
1 " 4" x 4" x 6'-6"	Sills front	4-4" x 4" x 12'
7 " 4" x 4" x 5'-7"	Posts	
4 " 2" x 4" x 4'-7"	Belting ends—cut to fit	4-2" x 4" x 10'
2 " 2" x 4" x 9'-7"	Belting front—cut to fit	
2 " 2" x 4" x 6'-6"	Belting front—cut to fit	3-2" x 4" x 8'
5 " 2" x 4" x 6'-0"	Top bracing	4-2" x 4" x 12'

TWO SEATS FOR BOYS—(Continued)

(Note: No responsibility is assumed for any inaccuracy.)

Siding (Screen, House and Partition):

52 pcs.	1" x 6" x 6'-0"	Siding for screen	26—1" x 6" x 12'
11 "	1" x 6" x 4'-0"	Partition	4—1" x 6" x 12'
23 "	1" x 6" x 5'-11"	Back of house	11—1" x 6" x 12'
39 "	1" x 6" x 7'-0"	Ends cut to fit	20—1" x 6" x 14'
5 "	1" x 6" x 7'-7"	Front	5—1" x 6" x 12'
22 "	1" x 6" x 1'-5"	Front over openings	

Roof:

Pieces Cut to Fit	Description	Order
2 pcs. 1" x 6" x 12'-9"	Front & back facia	1—1" x 6" x 14'
2 " 1" x 6" x 8'-9" (+2")	Side facia (cut 1 to 4 slope—on both ends)	1—1" x 6" x 18'
5 " 1" x 12'-7"	Decking (for roll roofing—requires 18 pcs.)	5—1" x 6" x 14'

Consolidated Order Bill for Lumber:

1 pcs.	2" x 8" x 16'
1 "	2" x 8" x 12'
8 "	2" x 6" x 14'
12 "	2" x 6" x 12'
1 "	2" x 6" x 8'
29 "	2" x 4" x 12'
18 "	2" x 4" x 10'
7 "	2" x 4" x 8'
1 "	4" x 4" x 12'
4 pcs.	4" x 4" x 12'
2 "	1" x 12' x 10'
3 "	1" x 8" x 8'
1 "	1" x 6" x 12'
26 "	1" x 6" x 14'
46 "	1" x 6" x 12'
2 "	1" x 6" x 10'
1 "	1" x 4" x 8'
1 "	1" x 3" x 8'

Miscellaneous Items:

7 pcs.	9' V-crimped or corrugated tin-roof(or 36' of 3' roll roofing)
17 only	½" x 5" machine bolts—house foundation
12 only	½" x 7" or 8" machine bolts—screen foundation
3½ lbs.	lead head nails
40 lbs.	16-penny nails (33 per pound)
25 lbs.	10-penny nails (60 per pound)
2 yds.	gravel
1 yd.	sand
13 sacks	cement
16 pcs.	¼" diam. rods 3'-4" long—reinforcing
8 pcs.	⅜" diam. rods 6' long—reinforcing
2 pcs.	⅜" diam. rods 3' long—reinforcing
2 pcs.	7' corrugated tin (or 5 pvs. 1" x 6" x 14')—drain boards
3 only	½" x 4" I-bolts for moving
300 ft.	barbed wire—urinal, urinal wall & slab retaining walls.
35 ft.	6" strips tar paper—construction joints 18 sq. ft.
2 only	cast iron risers complete
2 pcs.	26" x 4'-6" 20-gauge flat sheet—urinal back wall.
-----	petroleum asphalt (for galvanized iron urinal)

APPROXIMATE BILL OF MATERIAL

TWO SEATS FOR GIRLS

(Note: No responsibility is assumed for any inaccuracy.)

Curbing for pit 6 feet deep:

Pieces Cut to Fit	Description	Order
24 pcs. 2" x 6" x 4'-4"	Ends	8-2" x 6" x 14'
24 " 2" x 6" x 6'-0"	Front and back	12-2" x 6" x 12'
4 " 2" x 4" x 6'-1"	Corner posts	5-2" x 4" x 12'
4 " 2" x 4" x 6'-1"	Intermediate posts	
2 " 2" x 4" x 6'-0"	Foundation sills	
6 " 2" x 4" x 3'-4"	Center ties (cut to fit)	2-2" x 4" x 10'
2 " 2" x 4" x 2'-2"	Center floor supports	1-2" x 4" x 10'
1 " 2" x 4" x 1'-4"	Center floor supports	
4 " 1" x 12" x 4'-4"	Decking	2-1" x 12" x 10'
4 " 1" x 6" x 4'-4"	Decking	2-1" x 6" x 10'

Forming: (May be used on other privies of same size)

Pieces Cut to Fit:	Description	Order
2 pcs. 2" x 8" x 7'-2"	Front and back	2-2" x 8" x 8'
2 " 2" x 6" x 6'-6"	Ends	1-2" x 6" x 14'
2 " 2" x 4" x 6'-2"	For water table	1-2" x 4" x 14'
1 " 2" x 4" x 6'-4"	Front curbing under slab	1-2" x 4" x 8"
1 " 1" x 4" x 6'-4"	Retaining wall under slab	1-1" x 4" x 8'
2 " 1" x 4" x 0'-10"	Retaining wall under slab	
1 " 1" x 3" x 6'-2"	Joint between slabs	1-1" x 2" x 8'

House Framing:

Pieces Cut to Fit	Description	Order
1 pcs. 2" x 4" x 6'-8"	Back sill	1-2" x 4" x 8'
2 " 2" x 4" x 5'-10"	End sills	1-2" x 4" x 12'
1 " 2" x 4" x 1'-0"	Front sill	Use extra cuts
5 " 2" x 4" x 5'-8" (+1")	Back studs (cut 1 to 4 slope—short corner)	3-2" x 4" x 12'
3 " 2" x 4" x 7'-0"	Front studs (cut 1 to 4 slope—long corner)	1-2" x 4" x 14'
2 " 2" x 4" x 5'-9"	Front studs (cut 1 to 4 slope—ends square)	Use extra from back stud
2 " 2" x 4" x 1'-1"	Front studs (long corner)	Use extra cuts
2 " 2" x 4" x 6'-8"	Front and back plates	1-2" x 4" x 14'
2 " 2" x 4" x 3'-1"	Front bracing	2-2" x 4" x 12'
5 " 2" x 4" x 8'-9"	Rafters (cut 1 to 4 slope on both ends)	3-2" x 4" x 10'
2 " 2" x 4" x 6'-0"	Vent space cut to fit	1-2" x 4" x 12'
2 " 2" x 4" x 2'-11"	House belting (back)	Use extra cuts
2 " 2" x 4" x 5'-6"	House belting (ends)	2-2" x 4" x 12'
2 " 2" x 4" x 5'-6"	Partition	
3 " 2" x 4" x 2'-8"	Drain board	1-2" x 4" x 8'

Screen Framing:

Pieces Cut to Fit	Description	Order
2 pcs. 4" x 4" x 4'-7"	Sills (ends)	1-4" x 4" x 10'
1 " 4" x 4" x 11'-8"	Sills (front)	
6 " 4" x 4" x 5'-7"	Posts	4-4" x 4" x 12'
4 " 2" x 4" x 4'-7"	End belting cut to fit	2-2" x 4" x 10'
2 " 2" x 4" x 11'-8"	Front belting cut to fit	4-2" x 4" x 12'
4 " 2" x 4" x 6'-0"	Top bracing cut to fit	

Siding (Screen, House, and Partition):

Pieces Cut to Fit	Description	Order
44 pcs. 1" x 6" x 6'-0"	Siding for screen	22-1" x 6" x 12'
11 " 1" x 6" x 4'-0"	Siding for partition	4-1" x 6" x 12'
14 " 1" x 6" x 5'-11"	Back of house	7-1" x 6" x 12'
26 " 1" x 6" x 7'-0"	Ends cut to fit	13-1" x 6" x 14'
4 " 1" x 6" x 7'-7"	Front	4-1" x 6" x 8'
14 " 1" x 6" x 1'-5"	Front over openings	1-1" x 6" x 12'
		(finished with extra cuts from roof)

TWO SEATS FOR GIRLS—(Continued)

(Note: No responsibility is assumed for any inaccuracy.)

Roof:

Pieces Cut to Fit	Description	Order
2 pcs. 1" x 6" x 8'-4"	Front & back fascia boards_____	9-1" x 6" x 10'
2 " 1" x 6" x 8'-9" (+2")	Side fascia (cut 1 to 4 slope on both ends)_____	
5 " 1" x 6" x 8'-4"	Decking (18 pcs. required for roll roofing)_____	

Consolidated Order Bill for Lumber:

4 pcs.	4" x 4" x 12'
1 "	4" x 4" x 10'
2 "	2" x 8" x 8'
9 "	2" x 6" x 14'
12 "	2" x 6" x 12'
3 "	2" x 4" x 14'
18 "	2" x 4" x 12'
12 "	2" x 4" x 10'
4 pcs.	2" x 4" x 8'
2 "	1" x 12" x 10'
13 "	1" x 6" x 14'
34 "	1" x 6" x 12'
11 "	1" x 6" x 10'
1 "	1" x 4" x 8'
1 "	1" x 3" x 8'

5 pcs.
12 only
10 only
2½ lbs.
25 lbs.
25 lbs.
1½ yds.
¾ yd.
10 sacks
16 pcs.
8 pcs.
2 pcs.
1 pcs.
2 only
200 ft.
2 only

Miscellaneous Items:

9' V-crimped or corrugated tin roofing (or 27' of 3' roll roofing)
½" x 5" machine bolts—house foundation
½" x 7" x 8" machine bolts—screen foundation
lead head nails
16-penny nails
10-penny nails
gravel
sand
cement
¼" diameter rods 3'-4"—reinforcing_____
¾" diameter rods 6'-0"—reinforcing_____
¾" diameter rods 3'-0"—reinforcing_____
9' corrugated tin—drain board
½" x 4"—I-bolts for moving
barbed wire or { 10 pcs. 8' and
{ 8 pcs. 5' of ¼" diameter rods for curbing
cast iron risers complete

29.4 pounds



